

I am a retired Director of Engineering that specialized in unique solutions for wired and unwired communications. In the wired area, my company did extensive research into PLC from X-10 to broadband studies from DC to 30 MHZ. While communication could be made to work, we were faced with a problem that did not have any acceptable solutions. Impedance discontinuities in the power grid in both the home, and service upstream of the primary distribution transformer caused unreliable suckouts of the spectrum and associated problems with excessive signal loss due to radiation. This caused an unacceptable level of interference in many regular communication spectrum areas. Particularly, a problem in one home(i.e. AM broadcast interference) would not be the same in an adjacent home. The random impedance patterns across the spectrum, from house to house or grid area to grid area, made it impossible to provide a user acceptable interference solution. I respectfully suggest that the ARRL studies while very good at pointing out the problem are just the tip of the iceberg of what the real user world will see if BPL is approved. Thank you.